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Before the

FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of)	
Unbundled Access to Network Elements)	WC Docket No. 04-313
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers)))	WC Docket No. 01-338

ATTACHMENTS

OF

SUSAN M. BALDWIN

ON BEHALF OF THE
UTAH COMMITTEE OF CONSUMER SERVICES

SEPTEMBER 30, 2004

REDACTED VERSION

LIST OF ATTACHMENTS

(redacted versions of confidential attachments provided)

SMB-A	Statement of Qualifications of Susan M. Baldwin
SMB-1aHC	Utah Consumers Depend on UNE-P for Competitive Choice Among Local Telecommunications Providers
SMB-1bHC	Utah Consumers Depend on UNE-P for Competitive Choice Among Local Telecommunications Providers
SMB-2HC	Wire Centers in Qwest Proposed Relief Area With No Mass Market UNE Loop Service
SMB-3HC	UNE-Loop Presence Is Non-Existent in Many Wire Centers in Qwest's Proposed Non-Impairment Region
SMB-4C	Qwest Wire Centers Statewide, by MSA
SMB-5	CLECs Issued Discovery by the Division
SMB-6HC	CLECs Potentially Qualifying for Impairment Analysis
SMB-7HC	Wire Centers With CLECs Serving Residential and Business Customers, Using Self-Provisioned Switches
SMB-7HC SMB-8HC	

Attachment SMB-A Statement of Qualifications

SUSAN M. BALDWIN 17 Arlington Street Newburyport, MA 01950 617-388-4068

smbaldwin@comcast.net

Susan M. Baldwin has been actively involved in public policy for twenty-six years, twenty of which have been in telecommunications policy and regulation. Ms. Baldwin is presently an independent consultant. Ms. Baldwin received her Master of Economics from Boston University, her Master of Public Policy from Harvard University's John F. Kennedy School of Government, and her Bachelor of Arts degree in Mathematics and English from Wellesley College.

Ms. Baldwin has extensive experience both in government and in the private sector. Since 2001, Ms. Baldwin has been advising and testifying on behalf of public sector agencies as an independent consultant. In that capacity, she provided comprehensive technical assistance to the Massachusetts Department of Telecommunications and Energy (DTE), serving as a direct advisor in a comprehensive investigation of recurring and nonrecurring costs for unbundled network elements (UNEs). She sponsored testimony in a numbering resource and virtual "NXX" proceeding on behalf of the Iowa Office of Consumer Advocate, on UNE cost studies on behalf of the Illinois Citizens Utility Board, on Qwest's petition to reclassify certain services as competitive on behalf of the Attorney General of the State of Washington, and on CenturyTel's request to raise rates on behalf of the Arkansas Attorney General's Office. She also provided advisory services to the United States General Accounting Office in its preparation of a report on the Internet backbone market.

Most recently, Ms. Baldwin has been working on behalf of consumer advocates in the state *Triennial Review Order* ("TRO") proceedings. She prepared comprehensive testimony analyzing mass market impairment on behalf of the New Jersey Division of the Ratepayer Advocate, the Arkansas Office of the Attorney General, and the Utah Committee of Consumer Services. Testimony was not filed in Arkansas or Utah because of the DC Circuit Court ruling in USTA v. FCC, which caused these states to postpone their investigations of impairment.

Ms. Baldwin has testified before the Arkansas Public Service Commission, California Public Utilities Commission, Colorado Public Utilities Commission, Connecticut Department of Public Utility Control, Idaho Public Utilities Commission, Illinois Commerce Commission, Indiana Utility Regulatory Commission, Iowa Utilities Board, Massachusetts Department of Telecommunications and Energy, Nevada Public Service Commission, New Jersey Board of Regulatory Commissioners, Public Utilities Commission of Ohio, Rhode Island Public Utilities Commission, Tennessee Public Service Commission, Vermont Public Service Board, and Washington Utilities and Transportation Commission.

She has also participated in projects in Delaware, the District of Columbia, Hawaii, Illinois, New York, Pennsylvania, and Canada on behalf of consumer advocates, public utility commissions, and competitive local exchange carriers. Ms. Baldwin has served in a direct

advisory capacity to public utility commissions in the District of Columbia, Massachusetts, New Mexico, Utah and Vermont.

Ms. Baldwin worked with Economics and Technology, Inc. for twelve years, most recently as a Senior Vice President. Among her numerous projects were the responsibility of advising the Vermont Public Service Board in matters relating to a comprehensive investigation of NYNEX's revenue requirement and proposed alternative regulation plan. She participated in all phases of the docket, encompassing review of testimony, issuance of discovery, cross-examination of witnesses, drafting memoranda and decisions, and reviewing compliance filings. Another year-long project managed by Ms. Baldwin was the in-depth analysis and evaluation of the cost proxy models submitted in the FCC's universal service proceeding. Also, on behalf of the staff of the Idaho Public Utilities Commission, Ms. Baldwin testified on the proper allocation of US West's costs between regulated and non-regulated services. On behalf of AT&T Communications of California, Inc. and MCI Telecommunications Corporation, Ms. Baldwin comprehensively analyzed the non-recurring cost studies submitted by California's incumbent local exchange carriers.

Ms. Baldwin served as a direct advisor to the Massachusetts Department of Telecommunications and Energy (DTE) between August 2001 and July 2003, in Massachusetts DTE Docket 01-20, an investigation of Verizon's total element long run incremental cost (TELRIC) studies for recurring and nonrecurring unbundled network elements (UNEs). She assisted with all aspects of this comprehensive case in Massachusetts. Ms. Baldwin analyzed recurring and nonrecurring costs studies; ran cost models; reviewed parties' testimony, cross-examined witnesses, trained staff, met with the members of the Commission, assisted with substantial portions of the major orders issued by the DTE; and also assisted with the compliance phase of the proceeding.

Ms. Baldwin has participated in numerous investigations of the impact of proposed mergers of telecommunications carriers on consumers. Ms. Baldwin sponsored testimony on behalf of the Nevada Bureau of Consumer Protection on the proposed merger of Sprint and WorldCom; sponsored testimony on behalf of the Office of Ratepayer Advocates (ORA) of the California Public Utilities Commission and also on behalf of the Washington Office of Attorney General in their respective investigations of the proposed merger of Bell Atlantic Corporation and GTE Corporation; co-managed assistance to the Hawaii Division of Consumer Advocacy in the analysis of the proposed BA/GTE merger; sponsored testimony on behalf of the Ohio Consumers' Counsel and the Indiana Office of Utility Consumer Counselor on the SBC/Ameritech merger; co-sponsored testimony on behalf of the Connecticut Office of Consumer Counsel on the impact of SBC's acquisition of SNET on consumers; co-authored affidavits submitted to the FCC on behalf of consumer coalitions on the SBC/Ameritech and BA/GTE mergers; and co-managed a project to assist the ORA analyze the California Public Utilities Commission's investigation of the merger of Pacific Telesis Group and SBC Communications.

Ms. Baldwin has contributed to the development of state and federal policy on numbering

matters. On behalf of the Ad Hoc Telecommunications Users Committee, Ms. Baldwin participated in the Numbering Resource Optimization Working Group (NRO-WG), and in that capacity, served as a co-chair of the Analysis Task Force of the NRO-WG. She has also provided technical assistance to consumer advocates in the District of Columbia, Illinois, Iowa, Massachusetts, and Pennsylvania on area code relief and numbering optimization measures. Ms. Baldwin also co-authored comments on behalf of the National Association of State Utility Consumer Advocates in the FCC's proceeding on numbering resource optimization.

Ms. Baldwin served four years as the Director of the Telecommunications Division for the Massachusetts Department of Public Utilities (the predecessor to the DTE), where she directed a staff of nine, and acted in a direct advisory capacity to the DPU Commissioners. (The Massachusetts DTE maintains a non-separated staff, which directly interacts with the Commission, rather than taking an advocacy role of its own in proceedings). Ms. Baldwin advised and drafted decisions for the Commission in numerous DPU proceedings including investigations of a comprehensive restructuring of New England Telephone Company's rates, an audit of NET's transactions with its NYNEX affiliates, collocation, ISDN, Caller ID, 900-type services, AT&T's request for a change in regulatory treatment, pay telephone and alternative operator services, increased accessibility to the network by disabled persons, conduit rates charged by NET to cable companies, and quality of service. Under her supervision, staff analyzed all telecommunications matters relating to the regulation of the then \$1.7-billion telecommunications industry in Massachusetts, including the review of all telecommunications tariff filings; petitions; cost, revenue, and quality of service data; and certification applications. As a member of the Telecommunications Staff Committees of the New England Conference of Public Utility Commissioners (NECPUC) and the National Association of Regulatory Utility Commissioners (NARUC), she contributed to the development of telecommunications policy on state, regional, and national levels.

Ms. Baldwin has worked with local, state, and federal officials on energy, environmental, budget, welfare, and telecommunications issues. As a policy analyst for the New England Regional Commission (NERCOM), Massachusetts Department of Public Welfare (DPW), and Massachusetts Office of Energy Resources (MOER), she acquired extensive experience working with governors' offices, state legislatures, congressional offices, and industry and advocacy groups. As an energy analyst for NERCOM, Ms. Baldwin coordinated New England's first regional seminar on low-level radioactive waste, analyzed federal and state energy policies, and wrote several reports on regional energy issues. As a budget analyst for the DPW, she forecast expenditures, developed low-income policy, negotiated contracts, prepared and defended budget requests, and monitored expenditures of over \$100 million. While working with the MOER, Ms. Baldwin conducted a statewide survey of the solar industry and analyzed federal solar legislation.

Ms. Baldwin received Boston University's Dean's Fellowship. While attending the Kennedy School of Government, Ms. Baldwin served as a teaching assistant for a graduate course in microeconomics and as a research assistant for the school's Energy and Environmental Policy Center, and at Wellesley College was a Rhodes Scholar nominee. She has also studied in

Ghent, Belgium.

Record of Prior Testimony

In the matter of the Application of the New Jersey Bell Telephone Company for Approval of its Plan for an Alternative Form of Regulation, New Jersey Board of Regulatory Commissioners Docket No. T092030358, on behalf of the New Jersey Cable Television Association, filed September 21, 1992, cross-examined October 2, 1992.

DPUC review and management audit of construction programs of Connecticut's telecommunications local exchange carriers, Connecticut Department of Public Utility Control Docket No. 91-10-06, on behalf of the Connecticut Office of the Consumer Counsel, filed October 30, 1992, cross-examined November 4, 1992.

Joint petition of New England Telephone and Telegraph Company and Department of Public Service seeking a second extension of the Vermont Telecommunications Agreement, Vermont Public Service Board 5614, Public Contract Advocate, filed December 15, 1992, cross-examined December 21, 1992.

Application of the Southern New England Telephone Company to amend its rates and rate structure, Connecticut Department of Public Utility Control Docket No. 92-09-19, on behalf of the Connecticut Office of Consumer Counsel, filed March 26, 1993 and May 19, 1993, cross-examined May 25, 1993.

In the matter of the Application of Cincinnati Bell Telephone Company for Approval of an Alternative Form of Regulation and for a Threshold Increase in Rates, Public Utilities Commission of Ohio Case No. 93-432-TP-ALT, on behalf of Time Warner AxS, filed March 2, 1994.

Matters relating to IntraLATA Toll Competition and Access Rate Structure, Rhode Island Public Utilities Commission Docket 1995, on behalf of the Rhode Island Public Utilities Commission Staff, filed March 28, 1994 and June 9, 1994, cross-examined August 1, 1994.

In the Matter of the Application of The Ohio Bell Telephone Company for Approval of an Alternative Form of Regulation, Public Utilities Commission of Ohio Case No. 93-487-TP-ALT, on behalf of Time Warner AxS, filed May 5, 1994, cross-examined August 11, 1994.

In Re: Universal Service Proceeding: The Cost of Universal Service and Current Sources of Universal Service Support, Tennessee Public Service Commission Docket No. 95-02499, on behalf of Time Warner AxS of Tennessee, L.P., filed October 18, 1995 and October 25, 1995, cross-examined October 27, 1995.

In Re: Universal Service Proceeding: Alternative Universal Service Support Mechanisms, Tennessee Public Service Commission Docket No. 95-02499, on behalf of Time Warner AxS of Tennessee, L.P., filed October 30, 1995 and November 3, 1995, cross-examined November 7, 1995.

In the Matter of the Application of US West Communications, Inc. for Authority to Increase its Rates and Charge for Regulated Title 61 Services, Idaho Public Utilities Commission Case No. USW-S-96-5, on behalf of the Staff of the Idaho Public Utilities Commission, filed November 26, 1996 and February 25, 1997, cross-examined March 19, 1997.

A Petition by the Regulatory Operations Staff to Open an Investigation into the Procedures and

Methodologies that Should Be Used to Develop Costs for Bundled or Unbundled Telephone Services or Service Elements in the State of Nevada, Nevada Public Service Commission Docket No. 96-9035, on behalf of AT&T Communications of Nevada, Inc., filed May 23, 1997, cross-examined June 6, 1997.

Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture; Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks, California Public Utilities Commission R.93-04-003 and I.93-04-002, co-authored a declaration on behalf of AT&T Communications of California, Inc., and MCI Telecommunications Corporation, filed on December 15, 1997 and on February 11, 1998.

Consolidated Petitions for Arbitration of Interconnection Agreements, Massachusetts Department of Telecommunications and Energy, DPU 96-73/74. 96-75, 96-80/81, 96-83, and 96-84, on behalf of AT&T Communications of New England, Inc. and MCI Telecommunications Corporation, filed February 3, 1998.

In the Matter of the Application of US West Communications, Inc. for Specific Forms of Price Regulation, Colorado Public Utilities Commission Docket No. 97-A-540T, on behalf of the Colorado Office of Consumer Counsel, filed on April 16, 1998, May 14, 1998 and May 27, 1998, cross-examined June 2, 1998.

Joint Application of SBC Communications and Southern New England Telecommunications Corporation for Approval of a Change of Control, Connecticut Department of Public Utility Control Docket No. 98-02-20, on behalf of the Connecticut Office of Consumer Counsel, filed May 7, 1998 and June 12, 1998, cross-examined June 15-16, 1998.

Fourth Annual Price Cap Filing of Bell Atlantic-Massachusetts, Massachusetts Department of Telecommunications and Energy Docket DTE 98-67, on behalf of MCI Telecommunications Corporation, filed September 11, 1998 and September 25, 1998, cross-examined October 22, 1998.

Applications of Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, For Consent to Transfer Control, Federal Communications Commission CC Docket No. 98-141, co-sponsored affidavit on behalf of Indiana Utility Consumer Counselor, Michigan Attorney General, Missouri Public Counsel, Ohio Consumers' Counsel, Texas Public Utility Counsel and Utility Reform Network, filed on October 13, 1998.

In the Matter of the Joint Application of SBC Communications Inc., SBC Delaware, Inc., Ameritech Corporation and Ameritech Ohio for Consent and Approval of a Change of Control, Public Utilities Commission of Ohio Case No.98-1082-TP-AMT, on behalf of Ohio Consumers' Counsel, filed on December 10, 1998, cross-examined on January 22, 1999.

GTE Corporation, Transferor, and Bell Atlantic Corporation, Transferee, For Consent to Transfer Control, Federal Communications Commission CC Docket No. 98-184, co-sponsored an affidavit on behalf of a coalition of consumer advocates from Delaware, Hawaii, Maine, Maryland, Missouri, Ohio, Oregon, West Virginia, and Michigan, filed on December 18, 1998.

In the Matter of the Joint Application of GTE and Bell Atlantic to Transfer Control of GTE's California Utility Subsidiaries to Bell Atlantic, Which Will Occur Indirectly as a Result of GTE's Merger with Bell

Atlantic, California Public Utilities Commission A. 98-12-005, on behalf of the California Office of Ratepayer Advocate, filed on June 7, 1999.

In the Matter of the Investigation on the Commission's Own Motion Into All Matters Relating to the Merger of Ameritech Corporation and SBC Communications Inc., Indiana Utility Regulatory Commission Cause No. 41255, on behalf of the Indiana Office of Utility Consumer Counselor, filed on June 22, 1999 and July 12, 1999, cross-examined July 20, 1999.

In re Application of Bell Atlantic Corporation and GTE Corporation for Approval of the GTE Corporation - Bell Atlantic Corporation Merger, Washington Utilities and Transportation Commission UT-981367, on behalf of the Washington Attorney General Public Counsel Section, filed on August 2, 1999.

Application of New York Telephone Company for Alternative Rate Regulation, Connecticut Department of Public Utility Control Docket No. 99-03-06, on behalf of the Connecticut Office of Consumer Counsel, filed October 22, 1999.

In re: Area Code 515 Relief Plan, Iowa Utilities Board Docket No. SPU-99-22, on behalf of the Iowa Office of Consumer Advocate, filed November 8, 1999, and December 3, 1999, cross-examined December 14, 1999.

In re Application of MCI WorldCom, Inc. and Central Telephone Company - Nevada, d/b/a Sprint of Nevada, and other Sprint entities for Approval of Transfer of Control pursuant to NRS 704.329, Nevada Public Utilities Commission Application No. 99-12029, on behalf of the Nevada Office of the Attorney General, Bureau of Consumer Protection, filed April 20, 2000.

In re: Area Code 319 Relief Plan, Iowa Utilities Board Docket No. SPU-99-30, on behalf of the Iowa Office of Consumer Advocate, filed June 26, 2000 and July 24, 2000.

In re: Sprint Communications Company, L.P. & Level 3 Communications, L.L.C., lowa Utilities Board Docket Nos. SPU-02-11 & SPU-02-13, filed October 14, 2002 and January 6, 2003, cross-examined February 5, 2003.

Illinois Bell Telephone Company filing to increase unbundled loop and nonrecurring rates (tariffs filed December 24, 2002), Illinois Commerce Commission Docket No. 02-0864, on behalf of Citizens Utility Board, filed May 6, 2003 and February 20, 2004.

Qwest Petition for Competitive Classification of Business Services, Washington Utilities and Transportation Commission Docket No. 030614, on behalf of Public Counsel, filed August 13, 2003 and August 29, 2003, cross-examined September 18, 2003.

In the Matter of the Application of CenturyTel of Northwest Arkansas, LLC for Approval of a General Change in Rates and Tariffs, Arkansas Public Service Commission Docket No. 03-041-U, on behalf of the Attorney General, filed October 9, 2003 and November 20, 2003.

In the Matter of the Board's Review of Unbundled Network Elements, Rates, Terms and Conditions of Bell Atlantic New Jersey, Inc., New Jersey Board of Public Utilities Docket No. TO00060356, on behalf of the New Jersey Division of the Ratepayer Advocate, filed January 23, 2004.

In the Matter of the Implementation of the Federal Communications Commission's Triennial Review Order, New Jersey Board of Public Utilities Docket No. TO03090705, on behalf of the New Jersey Division of the Ratepayer Advocate, filed February 2, 2004.

Testimony before State Legislatures:

Testified on September 24, 1997, before the Massachusetts State Legislature Joint Committee on Government Regulations regarding House Bill 4937 (concerning area codes).

Publications/Presentations

Articles on telecommunications and energy policy in trade journals, and presentations at industry associations and conferences include the following:

Reports.

"Assessing SBC/Pacific's Progress in Eliminating Barriers to Entry: The Local Market in California Is Not Yet 'Fully and Irreversibly Open'" (with Patricia D. Kravtin, Dr. Lee L. Selwyn, and Douglas S. Williams). Prepared for the California Association of Competitive Telecommunications Companies, July 2000.

"Where Have All the Numbers Gone? (Second Edition): Rescuing the North American Numbering Plan from Mismanagement and Premature Exhaust" (with Dr. Lee L. Selwyn). Prepared for the Ad Hoc Telecommunications Users Committee, June 2000.

"Price Cap Plan for USWC: Establishing Appropriate Price and Service Quality Incentives for Utah" (with Patricia D. Kravtin and Scott C. Lundquist). Prepared for the Utah Division of Public Utilities, March 22, 2000.

"Telephone Numbering: Establishing a Policy for the District of Columbia to Promote Economic Development" (with Douglas S. Williams and Sarah C. Bosley). Prepared for the District of Columbia Office of People's Counsel, February 2000 (submitted to Eric W. Price, Deputy Mayor, April 6, 2000).

"The Use of Cost Proxy Models to Make Implicit Support Explicit, Assessing the BCPM and the Hatfield Model 3.1" (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, March 1997.

"The Use of Forward-Looking Economic Cost Proxy Models" (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC Docket No. CCB/CPB 97-2, February 1997.

"Continuing Evaluation of Cost Proxy Models for Sizing the Universal Service Fund, Analysis of the Similarities and Differences between the Hatfield Model and the BCM2" (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, October 1996.

"Converging on a Cost Proxy Model for Primary Line Basic Residential Service, A Blueprint for Designing a Competitively Neutral Universal Service Fund" (with Dr. Lee L. Selwyn). Prepared for the

National Cable Television Association, submitted in FCC CC Docket No. 96-45, August 1996.

- "The BCM Debate, A Further Discussion" (with Dr. Lee L. Selwyn and Helen E. Golding). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, May 1996.
- "The Cost of Universal Service, A Critical Assessment of the Benchmark Cost Model" (with Dr. Lee L. Selwyn). Prepared for the National Cable Television Association, submitted in FCC CC Docket No. 96-45, April 1996.
- "Funding Universal Service: Maximizing Penetration and Efficiency in a Competitive Local Service Environment" (with Dr. Lee L. Selwyn). Prepared for Time Warner Communications, Inc., October 1995.
- "A Balanced Telecommunications Infrastructure Plan for New York State" (with Dr. Lee L. Selwyn). Prepared for the New York User Parties, December 4, 1992.
- "A Roadmap to the Information Age: Defining a Rational Telecommunications Plan for Connecticut" (with Dr. Lee L. Selwyn, Susan M. Gately, JoAnn S. Hanson, David N. Townsend, and Scott C. Lundquist). Prepared for the Connecticut Office of Consumer Counsel, October 30, 1992.
- "Analysis of Local Exchange Carrier April 1988 Bypass Data Submissions" (with William P. Montgomery and Dr. Lee L. Selwyn). Prepared for the National Association of State Utility Consumer Advocates, August 1988.
- "Strategic Planning for Corporate Telecommunications in the Post-Divestiture Era: A Five Year View" (with Dr. Lee L. Selwyn, William P. Montgomery, and David N. Townsend). Report to the International Communications Association, December 1986.
- "Competitive Pricing Analysis of Interstate Private Line Services." Prepared for the National Telecommunications Network, June 1986.
- "Analysis of Diamond State Telephone Private Line Pricing Movements: 1980-1990." Prepared for Network Strategies, Inc., April 1985.
- "Analysis of New York Telephone Private Line Pricing Movements: 1980-1990." Prepared for Network Strategies, Inc., February 1985.

Presentations:

- "Impact of Federal Regulatory Developments on Consumers and Consumers' Impact on Regulatory Developments," Presentation for the Washington Attorney General's Office, Seattle, Washington, May 27, 2003.
- "The Finances of Local Competition" Presentation at the New England Conference of Public Utilities Commissioners 54th Annual Symposium, Mystic, Connecticut, May 21, 2001.
- "Facilities-Based Competition" Presentation at the New England Conference of Public Utilities Commissioners 52nd Annual Symposium, Bretton Woods, New Hampshire, May 24, 1999.

- "Exploring Solutions for Number Exhaust on the State Level" and "A Forum for Clarification and Dialogue on Numbering Ideas," ICM Conference on Number Resource Optimization, December 10-11, 1998.
- "Telecommunications Mergers: Impact on Consumers," AARP Legislative Council 1998 Roundtable Meeting, November 18, 1998
- "Consumer Perspectives on Incumbent Local Exchange Carrier Mergers," National Association of Regulatory Utility Commissioners 110th Annual Convention, November 11, 1998.
- Federal Communications Commission En Banc Hearing on "Proposals to Revised the Methodology for Determining Universal Service Support," CC Docket Nos. 96-45 and 97-160," June 8, 1998, panelist.
- "Universal Service: Real World Applications," 1997 National Association of State Utility Consumer Advocates Mid-Year Meeting, June 9, 1997.
- "Modeling operating and support expenses" and "Modeling capital expenses," panelist for Federal-State Joint Board on Universal Service Staff Workshops on Proxy Cost Models, January 14-15, 1997, CC Docket 96-45.
- "Evaluating the BCM2: An Assessment of Its Strengths and Weaknesses," presentation to the AT&T Cost Team (with Michael J. DeWinter), December 4, 1996.
- "Interpreting the Telecommunications Act of 1996 Mandate for the Deployment of Advanced Telecommunications Services in a Fiscally Responsible and Fully Informed Manner" (with Helen E. Golding), Proceedings of the Tenth NARUC Biennial Regulatory Information Conference, Volume 3, September 11-13, 1996.
- "Making Adjustments to the BCM2." Presentation to the Staff of the Federal-State Joint Board on Universal Service, September 16, 1996.
- "Converging on a Model: An Examination of Updated Benchmark Cost Models and their Use in Support of Universal Service Funding." Presentation to the National Association of Regulatory Utility Commissioners Summer Committee Meetings, July 22, 1996.
- "The Phone Wars and How to Win Them" (with Helen E. Golding). *Planning*, July 1996 (Volume 62, Number 7).
- "ETI's Corrections to and Sensitivity Analyses of the Benchmark Cost Model." Presentation to the Staff of the Federal-State Joint Board on Universal Service," May 30, 1996.
- "Redefining Universal Service." Presentation at the *Telecommunications Reports* conference on "Redefining Universal Service for a Future Competitive Environment," January 18, 1996.
- "Funding Universal Service: Maximizing Penetration and Efficiency in a Competitive Local Service Environment," (with Lee L. Selwyn, under the direction of Donald Shepheard), a Time Warner Communications Policy White Paper, September 1995.

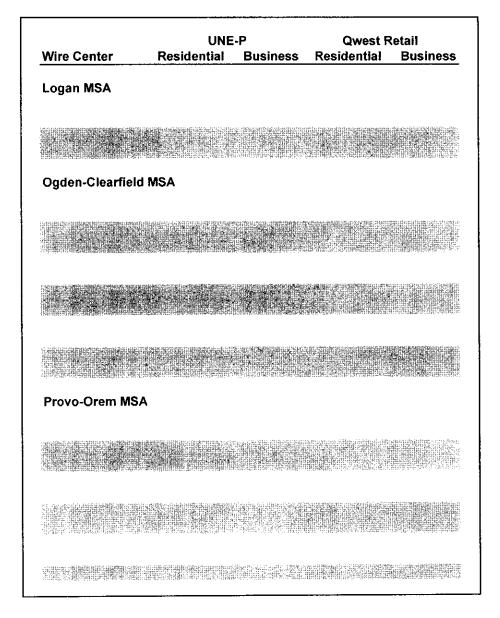
- "Stranded Investment and the New Regulatory Bargain," (with Lee L. Selwyn, under the direction of Donald Shepheard), a Time Warner Communications Policy White Paper, September 1995.
- "New Frontiers in Regulation." Presentation to the New England Women Economists Association, December 12, 1995.
- "Local Cable and Telco Markets." Presentation at the New England Conference of Public Utilities Commissioners 46th Annual Symposium, June 29, 1993.
- "Relationship of Depreciation to State Infrastructure Modernization." Presentation at the *Telecommunications Reports* conference on "Telecommunications Depreciation," May 6, 1993.
- "Crafting a Rational Path to the Information Age." Presentation at the State of New Hampshire's conference on the "Twenty-First Century Telecommunications Infrastructure," April 1993.
- "The Political Economics of ISDN," presentation at the John F. Kennedy School of Government seminar on "Getting from Here to There: Building an Information Infrastructure in Massachusetts," March 1993.
- "ISDN Rate-Setting in Massachusetts." Business Communications Review, June 1992 (Volume 22, No. 6).
- "The New Competitive Landscape: Collocation in Massachusetts." Presentation at TeleStrategies Conference on Local Exchange Competition, November 1991.
- "Telecommunications Policy Developments in Massachusetts." Presentations to the Boston Area Telecommunications Association, October 1989; March 1990; November 1990; June 1992. Presentation to the New England Telecommunications Association, March 1990.
- "Tariff Data is Critical to Network Management." *Telecommunications Products and Technology*, May 1988 (Volume 6, No. 5).
- "How to Capitalize on the New Tariffs." Presentation at Communications Managers Association conference, 1988.
- "Auction Methods for the Strategic Petroleum Reserve" (With Steven Kelman and Richard Innes). Prepared for Harvard University Energy Security Program, July 1983.
- "How Two New England Cities Got a \$100 Million Waste-to-Energy Project" (with Diane Schwartz). *Planning*, March 1983 (Volume 49, Number 3).
- "Evaluation of Economic Development and Energy Program in Lawrence, Massachusetts." (with Richard Innes). Prepared for U.S. Department of Energy, August, 1982.
- "Energy Efficiency in New England's Rental Housing." New England Regional Commission, 1981.
- "Low Level Radioactive Waste Management in New England." New England Regional Commission, 1981.

"The Realtor's Guide to Residential Energy Efficiency." Prepared for the U.S. Department of Energy and the National Association of Realtors, 1980.

Advisor to:

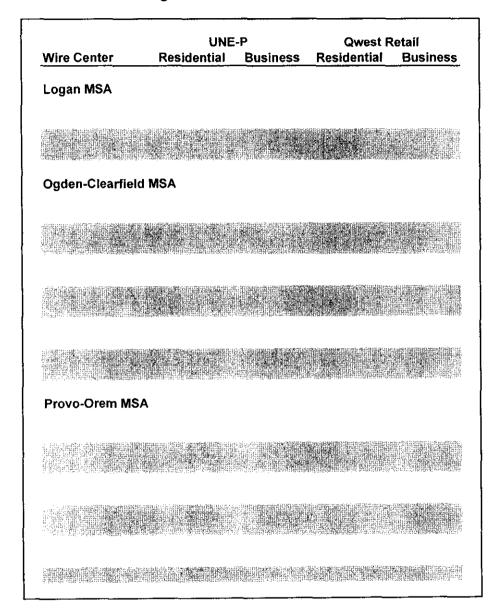
United States General Accounting Office Report to the Subcommittee on Antitrust, Business Rights and Competition, Committee on the Judiciary, U.S. Senate, *Characteristics and Competitiveness of the Internet Backbone Market*, GAO-02-16, October 2001.

Utah Consumers Depend on UNE-P for Competitive Choice Among Local Telecommunications Providers



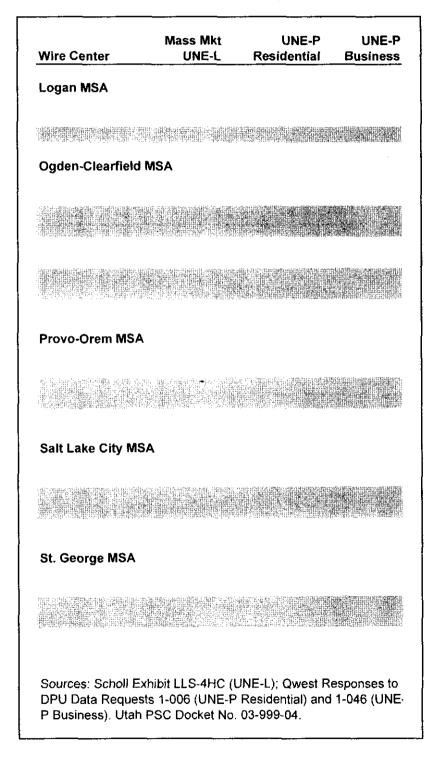
Wire Center Resid	UNE-P ential Busir	Qwest ess Residential	
Salt Lake City MSA		1100110101	34011000
	S. Salarasa		
St. George MSA			
No MSA			
Totals			
Sources: Qwest Response CLEC Responses to Division Response to MCI 1-163 (Q 999-04.	on Data Reque	st B.2 (UNE-P lines)	; Qwest
Notes: The above UNE-P lines by wire center a P lines. Their quantities are	and provid	led only statewide to	

Utah Consumers Depend on UNE-P for Competitive Choice Among Local Telecommunications Providers



Wire Center Salt Lake City N	Residential ISA	Business	Residential	Business
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	ing pangangan Panggunggan	de la companya da dela compa		n de tractición d Extractición de de
St. George MSA	ı			
No MSA				
Totals			 	
Sources: Qwest Qwest Response	s to DPU Data I	Requests 1-00		(UNE-P

Wire Centers in Qwest Proposed Relief Area With No Mass Market UNE Loop Service



UNE-Loop Presence Is Non-Existent in Many Wire Centers in Qwest's Proposed Non-Impairment Region

RAC A	Total Wire Centers in	Wire Centers with UNE-L	Wire Centers without UNE-L
MSA	Relief Area	activity	activity
Outside MSAs			
Outside MSAs MSA Totals			·

Qwest Wire Centers Statewide, by MSA

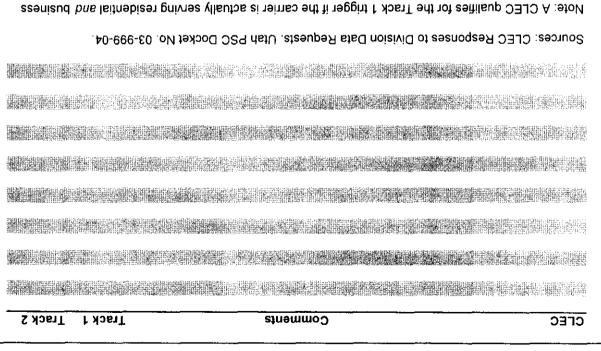
MSA	Wire Center	MSA	Wire Center
	one Establishe MDE 40		2C Utah BSC Dacket No.
Sources: Ea 03-999-04.	iston Exhibits VVRE-1C,	VVKE-20, VVKE-	-3C. Utah PSC Docket No.

CLECs Issued Discovery by the Division

CLEC	Response Status
1-800-RECONEX	Confidential Response Received
American Fiber Network	Confidential Response Received
American Fiber Systems	Confidential Response Received
At&t of the Mountain States	Confidential Response Received
Brooks Fiber Communications	Confidential Response Received
Comcast Phone of Utah	Confidential Response Received
Dieca Communications (DBA Covad)	Confidential Response Received
Electric Lightwave	Confidential Response Received
Eschelon Telecom	Confidential Response Received
Excel Telecommunications	Confidential Response Received
First Digital Telecom	Confidential Response Received
CG Telecom Group	Confidential Response Received
Integra Telecom of Utah	Confidential Response Received
Integra Telecom of Otali Intermedia Communications	Confidential Response Received
Intermedia Communications	Confidential Response Received
	Confidential Response Received
McI Worldcom Gommuncations	Confidential Response Received
MCImetro Access Transmissions Services	Confidential Response Received
McLeodUSA Telecommunications Services	Confidential Response Received
Sprint Spectrum LP (DBA Sprint PCS)	Confidential Response Received
(CG Utah	
Tel West Communications	Confidential Response Received
VarTec Telecom	Confidential Response Received
XQ-Utah	Confidential Response Received
ZTEL Communications	Confidential Response Received
ACN American Communications Network	No Response Received
Broadweave Networks of Utah	No Response Received
BT Communications Sales LLC	No Response Received
Bullseye Telecom	No Response Received
Ceristar	No Response Received
Ciera Network Systems	No Response Received
France Telecom Corporate Solutions	No Response Received
HJN Telecom	No Response Received
Idacom	No Response Received
KMC Telecom V	No Response Received
MFN of Utah/Metromedia Fiber Network Svcs	No Response Received
Netronix (DBA Nuchoice)	No Response Received
New Edge Networks	No Response Received
North County Communications	No Response Received
Premiere Network Services	No Response Received
SBC Telecom	No Response Received
and apply where the property of the property o	No Response Received
Winstar 360 Networks (USA) (FKA Worldwide Fiber)	Not Providing Services In Utah
SOU MERMOLKS (COM) (LIVA ANDIOMINE LINE)	Not Providing Services In Utah
All West (DBA All West World Connect)	Not Providing Services in Utah
	Not Providing Services In Utah
Cogent Communications of Utah	
Cypress Communications Operating Co	Not Providing Services In Utah

CLEC	Response Status
DPI Teleconnection LLC	Not Providing Services In Utah
DSL.net	Not Providing Services In Utah
El Paso Networks LLC	Not Providing Services In Utah
Emeritus Communication (FKA Teleglobe Bus Sol)	Not Providing Services in Utah
Emery Telecommunications And Video	Not Providing Services In Utah
Frontier (Citizens Long Distance Company)	Not Providing Services In Utah
Global Crossing Telemgt (FKA Frontier)	Not Providing Services In Utah
Granite Telecommunications LLC	Not Providing Services In Utah
GTC Telecom	Not Providing Services In Utah
lloka (DBA Mictrotech-Tel)	Not Providing Services In Utah
Intrado Communications	Not Providing Services In Utah
lonex Communications North (Birch Telecom)	Not Providing Services in Utah
Now Communications	Not Providing Services In Utah
O1 Communications of Utah LLC	Not Providing Services In Utah
Pac-West Telecomm	Not Providing Services In Utah
Preferred Carrier Services	Not Providing Services In Utah
Quantumshift Communications (FKA MVX Com)	Not Providing Services In Utah
Randy Sorenson & Assoc (DBA RSA Corp)	Not Providing Services In Utah
Sierra Pacific Communications	Not Providing Services in Utah
Sorenson Media	Not Providing Services In Utah
Suburban Access LLC	Not Providing Services In Utah
Talk America	Not Providing Services In Utah
Teligent Services	Not Providing Services In Utah
Time Warner Telecom of Utah	Not Providing Services In Utah
Touch America	Not Providing Services In Utah
U S Telepacific Communications (DBA Telepacific)	Not Providing Services In Utah
United Communications (DBA UC Hub)	Not Providing Services In Utah
Universal Access	Not Providing Services In Utah
Western Clec Corp	Not Providing Services In Utah
Wiltel Communications (FKA Williams Communications)	Not Providing Services In Utah

CLECs Potentially Qualifying for Impairment Analysis



Note: A CLEC qualifies for the Track 1 trigger if the carrier is actually serving residential and business customers with UNE-Loops. A CLEC qualalifies for the Track 2 trigger if the carrier is actually serving residential and business customers with UNE-Loops, UNEP, or Resale lines.

Wire Centers With CLECs Serving Residential and Business Customers, Using Self-Provisioned Switches

Wire Center	CLE Business UNE-Loops	Residential	CLE Business UNE-Loops	Residential
Logan MSA				
Ogden-Clearfield	MSA			
Provo-Orem MSA				

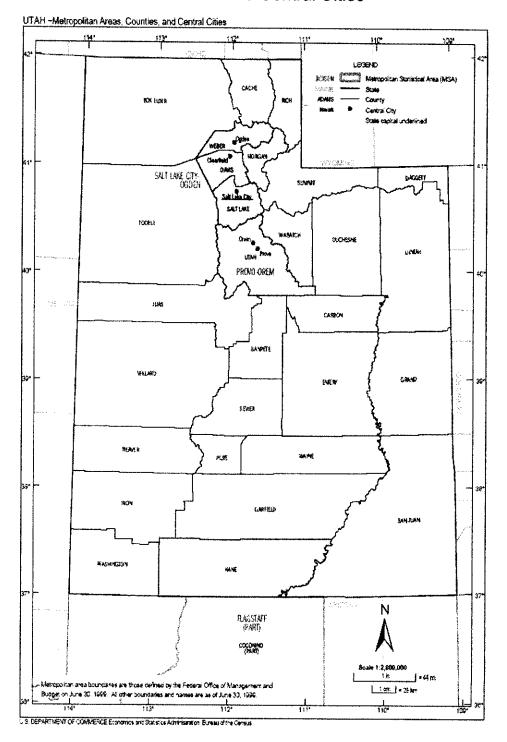
	CLE Business UNE-Loops		Busines	EC 2 s Residential s UNE-Loops
Salt Lake City MSA				
		e vojste se eve Legge tom engel		
			in in a made of the contract of the contract the contract of the contract of t	
St. George MSA				
No MSA				
Totals .				
Total over Qwest Propo	sed Relief Ar	ea (see note)	Business	Residential
Notes: provides only S	tatewide total	s for UNE-L (res	idential, bu	ısiness).
Sources: CLEC response 999-04.	s to Division [Data Request B.:	2. Utah PSC Do	ocket No. 03-

Wire Centers With CLECs Serving Residential and Business Customers, DS0 Equivalents¹

Wire Center	CLEC 1 Business Residential	CLEC 2 Business Residential	CLEC 3 Business Residential
Logan MSA			
Ogden-Clearfield	MSA		
Provo-Orem MSA			

Wire Center Salt Lake City MSA	CLEC Business	1 Residential	CLE Business	C 2 Residential	CLE Business	C 3 Residential
Out Lake Oily MOA						
	edenjiya kale ili ya Madadiya miya vist		o produka pilotopisi Produka pilotopisi Produka pilotopis			
				paranger Pertebus		
	eine presenti Palance e bride Palance e bride					
St. George MSA						
No MSA						
Totals						
Sources: CLEC Resp	onses to Divi	sion Data Requ	uests B.2.			
Notes: ¹ DS0 equivalenthe number of DS0 end by customer type residential and busine four carriers,, did table.	quivalents in s e (residential c ess customers	service in each or business). Fo s, and are thus	wire center bour CLECs po deemed to s	by mode of entroyided evidence entire	y(e.g UNE-F e of serving I mass market	P, UNE-L) both One of the

Utah Metropolitan Statistical Areas, Counties and Central Cities



2-4- 0	e FIPS State/County ²	County Ivarne
	arfield, UT Metropolitan Stat	
36260	49011	Davis County, UT
36260	49029	Morgan County, UT
36260	49057	Weber County, UT
Salt Lake C	ity, UT Metropolitan Statisti	cal Area
11620	49035	Salt Lake County, UT
11620	49043	Summit County, UT
11620	49045	Tooele County, UT
Provo-Oren	n, UT Metropolitan Statistica	al Area
39340	49023	Juab County, UT
39340	49049	Utah County, UT
aman IIT	ID Rationalitae Chalistical A	
-	D Metropolitan Statistical A	
30860	16041	Franklin County, ID
30860	49005	Cache County, UT
St. George,	UT Metropolitan Statistical	Area
11100	49053	Washington County, UT
CBSA Code		County Name
_	ty, UT Micropolitan Statistic	
14940	49003	Box Elder County, UT
Cedar City,	UT Micropolitan Statistical	Area
16260	49021	Iron County, UT
		•
	Micropolitan Statistical Area 49047	u Uintah County, UT
IMMMI	45041	Officer County, Or
10900		
	licropolitan Statistical Area	
Price, UT N	licropolitan Statistical Area 49007	Carbon County, UT
Price, UT M 39220	49007 re Based Statistical Area. ²	•